

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/970,638

DATE: 03/27/2002

TIME: 13:58:40

Input Set : F:\38155-20039.txt

Output Set: N:\CRF3\03272002\I970638.raw

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	34									1				5			
	36	aag c	tt gag	tcg	ggg	ggc	ggc	ggc	gaa	gga	ggg	gag	gga	act	gaa	gag	102
	37	Lys Le	eu Glu	Ser	Gly	Gly	Gly	Gly	Glu	Gly	Gly	Glu	Gly	Thr	Glu	Glu	
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	41	Glu As	sp Gly	Ala	Glu	Arg	Glu	Ala	Ala	Leu	Glu	Arg	Pro	Arg	Arg	Thr	
	42	_	25				30					35					
		aag c															198
	45	Lys A	rg Glu	Arg	Asp	Gln	Leu	Tyr	Tyr	Glu	Cys	\mathtt{Tyr}	Ser	Asp	Val	Ser	
		40				45					50					55	
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		Val H	is Glu	Glu	Met	Ile	Ala	Asp	Arg		Arg	Thr	Asp	Ala		Arg	
	50				60					65					70		
		ctg g															294
	53	Leu G	ly Ile		Arg	Asn	Trp	Ala	Ala	Leu	Arg	Gly	Lys	Thr	Val	Leu	
	54			75					80					85			
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	57	Asp Va	al Gly	Ala	Gly	Thr	Gly		Leu	Ser	Ile	Phe		Ala	Gln	Ala	
	58		90					95					100				
		ggg g															390
		Gly A	la Arg	Arg	Val	Tyr	Ala	Val	Glu	Ala	Ser	Ala	Ile	\mathtt{Trp}	Gln	Gln	
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### PATENT APPLICATION: US/09/970,638 TIME: 13:58:40 Input Set: F\38155-20039.txt					RAW	SEC	UENC	E LI	STIN								3/27/			_
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82 185 190 195 84 atg ctg gaa tgg cgc ctg ggc ttc tgg agc cag ggc ag ggc ag ggc ag cag cag	81	Len	Len	Pro	Ala	Ser	Ala	Glu	Leu	Phe	Ile	Ala	Pro	Ile	Ser	Asp	Gln			
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85 Met Leu Glu Trp Arg Leu Gly Phe Trp Ser Gln Val Lys Gln His Tyr 86 200 205 215 88 ggt gtg gac atg agt gcc tct gag ggc ttc gcc acg cgc tgt ctc atg 89 Gly Val Asp Met Ser Cys Leu Glu Gly Phe Ala Thr Arg Cys Leu Met 220 225 230 92 ggc cac tcg gag atc gtt gtg cag gga ttg tcc ggc gag gac gtg ctg 93 Gly His Ser Glu Ile Val Val Gln Gly Leu Ser Gly Glu Asp Val Leu 94 235 96 gcc cgg ccg cag cgc ttt gcc cag cta gag ctt ccc ggc ggc ggc ttg 97 Ala Arg Pro Gln Arg Phe Ala Gln Leu Glu Leu Ser Arg Ala Gly Leu 98 250 255 100 gag cag ag ag ctg gag gcc gag ggc ggc ggc ggc ggc gcc ggc tgg 101 Glu Gln Glu Leu Glu Ala Gly Val Gly Gly Arg Phe Arg Cys Ser Cys 102 265 270 275 104 tat ggc tcg gcg cc atg cat gag cat ggc ttt gcc atc tgg ttc cag gtg acc 105 Tyr Gly Ser Ala Pro Met His Gly Phe Ala Ile Trp Phe Gln Val Thr 106 280 285 108 ttc cct gga ggg gag tcg gag aaa ccc ctg gtg ctg tcc acc tcg cct 109 Phe Pro Gly Gly Glu Ser Glu Lys Pro Leu Val Leu Ser Thr Ser Pro 110 300 305 112 ttt cac ccg gcc act cac tgg aaa cag gcg gcc ct ct tac ctg aca gag 101 114 315 320 325 116 ccg gtg caa gtg gag caa gac acg gac gac gg cgc tt cag gag aatc acg ctg 117 Pro Val Gln Val Glu Gln Gln Asp Thr Asp Val Ser Gly Glu Ile Thr Leu 118 330 325 110 ctg ccc tcc cgg cac aac ccc cgc cgc cgc cgc cgc c		atq		qaa	tgg	cgc	ctg	ggc	ttc	tgg	agc	cag	gtg	aag	cag	cac	tat		678	
88 gdt gdg gac atg agc tgc ctg gag ggc ttc gcc acg cgc tgt ctc atg 89 Gly Val Asp Met Ser Cys Leu Glu Gly Phe Ala Thr Arg Cys Leu Met 90 220 225 230 92 ggc cac tcg gag atc gtt gtg cag gga ttg tcc ggc gag gac gtg ctg 93 Gly His Ser Glu Ile Val Val Gln Gly Leu Ser Gly Glu Asp Val Leu 94 235 240 96 gcc cgg ccg cag cag cgc ttt gct cag cta gag ctc tcc cgc gcc ggc ttg 97 Ala Arg Pro Gln Arg Phe Ala Gln Leu Glu Leu Ser Arg Ala Gly Leu 98 250 255 260 100 gag cag gag ctg gag gcc gga gtg ggc ggg cgc ttc cgc tgc agc tgc 101 Glu Gln Glu Leu Glu Ala Gly Val Gly Gly Arg Phe Arg Cys Ser Cys 102 265 270 104 tat ggc tcg gcg ccc atg cat gat gcg ttt gcc atc tgg ttc cag gtg acc 105 Tyr Gly Ser Ala Pro Met His Gly Phe Ala Ile Trp Phe Gln Val Thr 106 280 285 290 295 108 ttc cct gga ggg ggg gg aaa ccc ctg gtg ctg tcc acc tcg cct 109 Phe Pro Gly Gly Glu Ser Glu Lys Pro Leu Val Leu Ser Thr Ser Pro 110 300 305 310 112 ttt cac ccg gcc act cac tgg aaa cag gcg ctc ctc tac ctg aac gag 1014 315 320 325 116 ccg gtg caa gtg gag caa gac acg gac gtt tca gga gag atc acg ctg 117 Pro Val Gln Val Glu Gln Asp Thr Asp Val Ser Gly Glu Ile Thr Leu 118 330 35 340 120 ctg ccc tcc cgg cac aac cac ccg tcg ctg ctg ctg ctg ctg ctac 110 2 345 350 355 124 aaa gtg gga gac cag gag gag aag acc aaa aac cac aca aaca ctt gca acc act gag gac 1158 125 Lys Val Gly Asp Gln Glu Glu Lys Thr Lys Asp Phe Ala Met Glu Asp 126 360 365 370	85	Met	Leu	Ğlu	Trp	Arg	Leu	Gly	Phe	Trp	Ser	Gln	Val	Lys	Gln	His	\mathtt{Tyr}			
89 Gly Val Asp Met Ser Cys Leu Glu Gly Phe Ala Thr Arg Cys Leu Met 220 225 230 92 ggc cac tcg gag atc gtt gtg cag gga ttg tcc ggc gag gac gtg ctg 33 Gly His Ser Glu Ile Val Val Gln Gly Leu Ser Gly Glu Asp Val Leu 240 245 96 gcc cgg ccg cag cgc ttt gct cag cta gag ctc tcc cgc gcc ggc ttg 97 Ala Arg Pro Gln Arg Phe Ala Gln Leu Glu Leu Ser Arg Ala Gly Leu 82 250 255 260 100 gag cag gag ctg gag gcc gga gtg ggc ggc ggc ttc cgc tgc agc tgc 100 gag cag gag ctg gag gcc gga gtg ggc ggc ttc cgc tgc agc tgc 101 Glu Gln Glu Leu Glu Ala Gly Val Gly Gly Arg Phe Arg Cys Ser Cys 102 265 270 275 104 tat ggc tcg gcg ccc atg cat ggc ttt gcc atc tgg ttc cag gtg acc 105 Tyr Gly Ser Ala Pro Met His Gly Phe Ala Ile Trp Phe Gln Val Thr 106 280 285 290 295 108 ttc cct gga ggg gag tcg gag aaa ccc ctg gtg ctg cac ctc 109 Phe Pro Gly Gly Glu Ser Glu Lys Pro Leu Val Leu Ser Thr Ser Pro 110 300 305 310 112 ttt cac ccg gcc act cac tgg aaa cag gcg ctc ctc tac ctg aac gag 113 Phe His Pro Ala Thr His Trp Lys Gln Ala Leu Leu Tyr Leu Asn Glu 114 315 320 325 116 ccg gtg caa gtg gag caa gac agc agc gtt tca gga gag atc acg ctg 117 Pro Val Gln Val Glu Gln Asp Thr Asp Val Ser Gly Glu Ile Thr Leu 118 330 35 340 120 ctg ccc tcc cgg cac aac ccc cgt cgc ctg cgc gtg ctg ctg ctac 1110 120 4345 350 355 124 aaa gtg gga gac cag gag gag aag acc aaa gac caa gac cat gag gag acc cat gag gag acc caa gag gag acc caa gag gag	86	200					205					210					215			
90	88	ggt	gtg	gac	atg	agc	tgc	ctg	gag	ggc	ttc	gcc	acg	cgc	tgt	ctc	atg		726	
92 ggc cac tcg gag atc gtt gtg cag gga ttg tcc ggc gag gac gtg ctg 93 Gly His Ser Glu Ile Val Val Gln Gly Leu Ser Gly Glu Asp Val Leu 94 235 240 245 96 gcc cgg ccg cag cgc ttt gct cag cta gag ctc tcc cgc gcc ggc ttg 97 Ala Arg Pro Gln Arg Phe Ala Gln Leu Glu Leu Ser Arg Ala Gly Leu 98 250 255 260 100 gag cag gag ctg gag gcc gga gtg ggc ggc gcc tc cgc tgc agc tgc 101 Glu Gln Glu Leu Glu Ala Gly Val Gly Gly Arg Phe Arg Cys Ser Cys 102 265 270 275 104 tat ggc tcg gcg ccc atg cat gac tgc atc tgc tcag gtg acc 105 Tyr Gly Ser Ala Pro Met His Gly Phe Ala Ile Trp Phe Gln Val Thr 106 280 285 290 295 108 ttc cct gga ggg gag tcg gag acc cc ctg gtg ctg tcc acc tcg cct 109 Phe Pro Gly Gly Glu Ser Glu Lys Pro Leu Val Leu Ser Thr Ser Pro 110 300 305 310 112 ttt cac ccg gcc act cac tgg aaa cag gcg ctc ctc tac ctg aac gag 1014 113 Phe His Pro Ala Thr His Trp Lys Gln Ala Leu Leu Tyr Leu Asn Glu 114 315 320 325 116 ccg gtg caa gtg gag caa gac acg gac gtt tca gga gag atc acg ctg 117 Pro Val Gln Val Glu Gln Asp Thr Asp Val Ser Gly Glu Ile Thr Leu 118 330 335 120 ctg ccc tcc ccg cac aac ccc ctg tcg ctg ctg ctg ctg ctg ctg ct		Gly	Val	Asp	Met		Cys	Leu	Glu	Gly		Ala	Thr	Arg	Cys		Met			
93 Gly His Ser Glu Ile Val Val Gln Gly Leu Ser Gly Glu Asp Val Leu 94																			774	
94	92	ggc	cac	tcg	gag	atc	gtt	gtg	cag	gga	ttg	tcc	ggc	gag	gac	gtg	ctg		//4	
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97 Ala Arg Pro Gln Arg Phe Ala Gln Leu Glu Leu Ser Arg Ala Gly Leu 98								~a+	626		~~~	ata	taa	aaa		aac	tta		822	
98	96	gcc	cgg	Bro	Cln	Ara	Dho	Δla	Gln	Len	Glu	T.eli	Ser	Ara	Δla	Glv	Leu		022	
100 gag cag gag ctg gag gcc gga gtg ggc ggc ctc ccc cgc tgc agc tgc 870 101 Glu Gln Glu Leu Glu Ala Gly Val Gly Gly Arg Phe Arg Cys Ser Cys 102		АТА	AIG		GIII	AIG	rne	ALU		пса	Olu	neu	501			0-1				
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108 ttc cct gga ggg ggg ggg tcg gag aaa ccc ctg gtg ctg tcc acc tcg cct 966 109 Phe Pro Gly Gly Glu Ser Glu Lys Pro Leu Val Leu Ser Thr Ser Pro 300 305 310 112 ttt cac ccg gcc act cac tgg aaa cag gcg ctc ctc tac ctg aac gag 1014 113 Phe His Pro Ala Thr His Trp Lys Gln Ala Leu Leu Tyr Leu Asn Glu 114 315 320 325 116 ccg gtg caa gtg gag caa gac acg gac gtt tca gga gag atc acg ctg 117 Pro Val Gln Val Glu Gln Asp Thr Asp Val Ser Gly Glu Ile Thr Leu 118 330 335 340 120 ctg ccc tcc cgg cac aac acc ccc cgt cgc ctg cgc gtg ctg ctg ctg c	105	Ту	r Gl	y Se	r Ala	a Pro	o Met	: His	s Gly	Phe	Ala	ı Ile	e Tr	p Phe	e Glr	n Val				
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113 Phe His Pro Ala Thr His Trp Lys Gln Ala Leu Leu Tyr Leu Asn Glu 114 315 320 325 116 ccg gtg caa gtg gag caa gac acg gac gtt tca gga gag atc acg ctg 116 ccg gtg caa gtg gag caa gac acg gtg tt tca gga gag atc acg ctg 116 117 Pro Val Gln Val Glu Gln Asp Thr Asp Val Ser Gly Glu Ile Thr Leu 330 335 340 120 ctg ccc tcc cgg cac aac ccc cgt cgc ctg cgc ctg ctg ctg ctg ct	110)											- a+	a + a	a ata				101	1
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116 ccg gtg caa gtg gag caa gac acg gac gtt tca gga gag atc acg ctg 117 Pro Val Gln Val Glu Gln Asp Thr Asp Val Ser Gly Glu Ile Thr Leu 118			е нт	S PI			C HTS	3 II.	, rile			ı ne	T LE	u iy.	326	, 221 2	ı Giu			
117 Pro Val Gln Val Glu Gln Asp Thr Asp Val Ser Gly Glu Ile Thr Leu 118			a at	a 02			r caa	a dad	2 800			t ca	a aa	а ста			a cta		1062	2
118	117	7 Pro	y yc o Va	9 Cu 1 G1	n Vai	g gu:	ı Glı	Asi	o Thr	Ast	Va]	L Se:	r Gl	v Gl	u Ile	Th	r Leu			
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121 Leu Pro Ser Arg His Asn Pro Arg Arg Leu Arg Val Leu Leu Arg Tyr 122 345 350 355 124 aaa gtg gga gac cag gag gag aag acc aaa gac ttt gcc atg gag gac 1158 125 Lys Val Gly Asp Gln Glu Glu Lys Thr Lys Asp Phe Ala Met Glu Asp 126 360 365 370 375			g cc			g ca	c aac	c cc	c cgt	. cgc	cto	g cg	c gt	g ct	g ct	g cg	c tac		1110	0
122 345 350 355 124 aaa gtg gga gac cag gag gag aag acc aaa gac ttt gcc atg gag gac 1158 125 Lys Val Gly Asp Gln Glu Glu Lys Thr Lys Asp Phe Ala Met Glu Asp 365 370 375	121	L Lei	u Pr	o Se	r Ar	g His	s Ası	n Pro	o Arg	Arg	J Lei	ı Ar	y Va	l Le	u Lei	ı Ar	g Tyr			
125 Lys Val Gly Asp Gln Glu Glu Lys Thr Lys Asp Phe Ala Met Glu Asp 126 360 365 370 375	122	2	34	5				350)				35	5						
126 360 365 370 375	124	laa	a gt	g gg	a ga	c ca	g gag	g gag	gaag	g acc	aaa	a ga	c tt	t gc	c ate	g ga	g gac		115	8
120 300				1 Gl	y As	p Gl			ı Lys	Thi	r Lys			e Al	a Met	t Gl				
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	128	3 tg	a gc	gttg	ccaa	ggg	cgaat	tte 9	gttta	aaaco	et go	cagga	acta	g					12U.	1

RAW SEQUENCE LISTING

DATE: 03/27/2002 PATENT APPLICATION: US/09/970,638 TIME: 13:58:40

Input Set : F:\38155-20039.txt

Output Set: N:\CRF3\03272002\I970638.raw

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RAW SEQUENCE LISTING

DATE: 03/27/2002 TIME: 13:58:40

PATENT APPLICATION: US/09/970,638

Input Set : F:\38155-20039.txt

Output Set: N:\CRF3\03272002\1970638.raw

182 340 345 350	
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196 cgggaacggg accagctgta ctacgagtgc tactcggacg tttcggtcca cgaggagatg	180
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225 Pro Asp Gid Led Arg Pro Tyl Arg Lys Val Tie Gry Gid Ard Tie Led 226 20 25 30	
226 20 25 25 25 25 26 Arg	
227 Lys Lys Thr Lys Lys Asn Glu Met Ala Val Val Lys Thr Val Leu Arg	
440 33	
229 Lys Gly Glu Glu Asp Phe Glu Gly Leu Leu Gly Glu Gly Tyr Gly	
230 50 55 60	
231 Ile Thr Gly Glu Tyr Arg Thr Arg Arg Glu Leu Leu Ala Gly Glu Lys	
232 65 70 75 80	
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235 Lys Leu Asp Val Ser Lys Val Tyr Phe Ser Pro Arg Leu Glu Gly Glu

RAW SEQUENCE LISTING DATE: 03/27/2002 PATENT APPLICATION: US/09/970,638 TIME: 13:58:41

Input Set : F:\38155-20039.txt

Output Set: N:\CRF3\03272002\I970638.raw

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	_	Ala	Lys	Arg	Val	Tyr	Ala	Val	Asp	Leu		Pro	GIU	Ala	Val	
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	Ile	Gln	Thr		Val	Asn	ьys	тте		Pro	тте	ьeu	СТХ		Val	AIG
246		_		180		_	-1		185	**- 7	*** -	a	T	190	T	T 0
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254	-	_	_ •		245			-	**- 1	250	3	T 1.	T	7	255	715
	Glu	Lys	Ala		Pro	Phe	ьeu	Pro		GIU	Arg	тте	ьуѕ		Ald	Ala
256				260		_	1	a 1	265	.	T	T	3	270	170]	T
	Glu	Lys		GIŸ	vaı	Lys	vaı		тте	ьeu	гуѕ	гуя	285	гуу	vaı	гур
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VERIFICATION SUMMARY

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TIME: 13:58:42

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Output Set: N:\CRF3\03272002\1970638.raw

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